App. No. 10/577,287 Reply to Non-Final Office Action of April 14, 2010

I. Listing of Claims

Please amend the Claims as follows:

1. (Currently Amended) A seat belt system for a vehicle seat having a backrest which can be reclined through a range of reclined angles and having a retractor mounted within the backrest for allowing a seat belt to be drawn out and wound up in the retractor, comprising:

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the retractor having a locking device for locking the retractor thereby preventing drawing out of the seat belt;

the retractor having an acceleration sensor for actuating the locking device; an angle detection device for detecting a reclining angle of the backrest; and a sensor controller responsive to the angle detection device that brings the acceleration sensor into an operable state enabling locking of the retractor when the reclining angle is within the range where the passenger wears the seat belt and brings the acceleration sensor into an inoperable state disabling locking of the retractor by the acceleration sensor when the reclining angle is within a range where the passenger does not wear the seat belt, and wherein the backrest of the seat is rotatably connected to a seat cushion and the sensor controller comprises:

a posture controller for orienting the acceleration sensor in the vertical direction; and

an interlocking member for allowing the posture controller to interlock with the angle detection device,

wherein the angle detection device is a link mechanism that is disposed in a connecting portion between the backrest and the seat cushion so as to detect

the reclined angle of the backrest and to rotate the interlocking member in accordance with the reclined angle, and

wherein the posture controller of the sensor controller controls the acceleration sensor to be kept horizontal by means of the rotation of the interlocking member when the reclined angle is within the range where the passenger wears the seat belt, and the posture controller of the sensor controller does not interlock with the angle detection device when the reclining angle is within the range where the passenger does not wear the seat belt.

- 2. (Previously Presented) The seat belt system according to Claim 1, wherein an initial position of the backrest is a position where the backrest is reclined by a predetermined angle with respect to a vertical direction, and wherein the range of reclining angle where the passenger does not wear the seat belt is a range where the backrest is reclined forward by about 10 degrees or more from the initial position, and the range where the passenger wears the seat belt is a remaining range.
- 3. (Cancelled)
- 4. (Previously Presented) The seat belt system according to Claim 1, wherein the sensor controller further comprises a sensor deactivator that detects a winding amount of the seat belt on the retractor when the reclining angle is within the range

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where the passenger does not wear the seat belt and deactivates the acceleration sensor from locking the retractor.

5. (Currently Amended) The seat belt system according to Claim [[3]] 1, wherein the angle detection device comprises:

a first detection member that is fixed to the seat cushion so as to detect the reclined angle of the backrest;

a second detection member that is fixed to the backrest so as to detect the reclined angle of the backrest and is connected to the first detection member by means of a first linkage;

a first link member having a first link end connected to the first detection member by means of a second linkage; and

a second link member having a second link end connected to an other end of the first link member by means of a third linkage and the second link other end is connected to the second detection member by means of a forth linkage, and

wherein the rotation of the second link member by the fourth linkage is transmitted to the posture controller through the interlocking member.

6. (Previously Presented) The seat belt system according to Claim 5, wherein the angle detection device is housed in the second detection member that also serves as a housing case.

7. (Currently Amended) The seat belt system according to Claim [[3]] 1, wherein the acceleration sensor is a sensor-weight type acceleration sensor,

wherein the posture controller comprises a sensor-weight casing that houses a sensor weight and is pivotably mounted in the backrest, a cam groove formed in the sensor-weight casing, and a posture control lever that slides in the cam groove by means of the interlocking member, and

wherein the posture control lever slides in the cam groove so as to keep the sensor-weight casing horizontal when the reclined angle is within the range where the passenger wears the seat belt, and the sensor control lever does not interlock with the angle detection device when the reclined angle is within the range where the passenger does not wear the seat belt.

- 8. (Currently Amended) The seat belt system according to Claim [[3]] 1, wherein the interlocking member is a flexible cable.
- 9. (Currently Amended) A seat belt system for a vehicle seat having a backrest which can be reclined through a range of reclined angles and having a retractor mounted within the backrest for allowing a seat belt to be drawn out and wound up in the retractor, comprising:

the retractor having a locking device for locking an operation of drawing out the seatbelt as needed, an acceleration sensor for actuating the locking device, and a posture controller for controlling a position of the acceleration sensor, and

an angle detection device for detecting a reclined angle of the backrest of the seat; and

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an interlocking member for allowing the posture controller to interlock with the angle detection device, and

wherein the backrest of the seat is rotatably connected to a seat cushion on which the passenger sits, the acceleration sensor is mounted in the backrest of the seat, the angle detection sensor is a link mechanism that is disposed in a connecting portion between the backrest and the seat cushion so as to detect the reclined angle of the backrest and to rotate the interlocking member in accordance with the reclined angle, and the posture controller controls the acceleration sensor to be kept horizontal by means of the rotation of the interlocking member when the reclined angle is within the range where the passenger wears the seat belt, wherein the posture controller does not interlock with the angle detection device when the reclined angle is within the range where the passenger does not wear the seat belt.

10. (Previously Presented) The seat belt system according to Claim 9, wherein an initial position of the backrest of the seat is a position where the backrest is reclined backward by a predetermined angle with respect to a vertical direction, and the interlocking member does not interlock with the locking device within a range where the backrest is reclined forward by about 10 degrees or more from the initial position.

11. (Cancelled)

(Cancelled)

12.

13. (Currently Amended) The seat belt system according to Claim 9, wherein the retractor further comprises a sensor deactivator that detects a winding amount of the seat belt when the reclining reclined angle is within the range where the passenger does not wear the seat belt and deactivates the acceleration sensor.

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14. (Previously Presented) The seat belt system according to Claim 9, wherein the acceleration sensor is a sensor-weight type acceleration sensor,

wherein the retractor further comprises a sensor-weight casing that houses a sensor weight of the acceleration sensor and is pivotably mounted in the retractor and a posture control lever that is activated by the interlocking member,

wherein a cam groove in which the posture control lever slides is formed in the sensor-weight casing, and

wherein the posture control lever slides in the cam groove so as to keep the sensor-weight casing horizontal when the reclined angle is within the range where the passenger wears the seat belt.